RAILWAY JOTTINGS.

The resistance of the air to the rapidity of the flight of the locomotive and its train while in motion, is about to be 'compensated,' as it were, in rather a novel way, by an increase of energy and speed, to which that resistance itself is to be made subservient, according to its intensity, so that the greater the actual resistance, the greater the possible compensation, so far, at least, as an air-blast, by urging the engine fire, is capable of aiding in the generation and sustainment of power, and especially in the saving of so much of it as would be otherwise necessary in the sustainment of the ordinary air blast itself. The resistance of the air confronting the line of locomotion, yields, to all intents and purposes, an air blast capable of being thus harnessed by human ingenuity, and made to assist in counteracting its own inevitable tendencies, and that *especially* when the negative rush of air is seconded and reinforced by a positive current, also *in the teeth* of the locomotion. Indeed, such a triumph over Nature's laws, if practicable and complete, is only to be won by one of the happiest hits, if not the highest efforts, of human ingenuity; such as that by means of which, *e. g.*, the contraction and expansion of the brass and steel of clock and watch-work by cold and heat were 'compensated' through the appliance of these very tendencies themselves to the 'compensating' pendulum and balance. The end in view in the present instance is attained by the guidance of the rush or blast of air along a series of deflecting plates on the sides of the ash-box, which is divided into three longitudinal chambers,—so that, when the engine is in motion and exposed to the resistance or negative rush of the air, it impinges on these plates, and passes towards the fire-bars and the furnace, where it does the requisite duty; the resultant air and vapour passing afterwards along a second series of plates, inserted into the smoke-box, and leading into a chamber, terminating in an annular opening which surrounds the exhaust-pipe, and through which, and up the chimney, it is propelled with conditional force, according to the velocity of the engine and the resistance of the 'blast.' If necessary, the new blast may be shut off, or the ordinary blast reverted to. The patentee who has thus ingeniously made way with the wind in his face is a Mr. Kite.——The settlement of a much agitated question is likely to be promoted by a recent decision of the Chief Baron in the Court of Exchequer, in the case of a holder of 1,000 shares in the "Hull and Lincoln Direct" line against the directors for repayment in full of his deposits. Verdict for the defendants, who had offered the plaintiff his share *pro rata* of the surplus.——On the Maldon, Witham, and Braintree line upwards of 1,000 labourers are busily employed by Mr. Jackson, the contractor for the Royal Exchange, and several Government works. The navvies are said to be as steady and well conducted as those for whose orderly conduct on the Cambridge line the same contractor was complimented by the Vice-chancellor.——The Minster and Deal line was opened on the 30th ult.——At a recent meeting of the Southampton Improvement Board, according to the *Hampshire Advertiser*, Mr. Hicks denied that any filling in of the old canal, below the new tunnel on the Dorchester line, with concrete, had taken place, as had been stated by the sub-contractor.——On Wednesday week a clay cutting of the Bishopstoke and Salisbury branch suddenly gave way, and buried several labourers, seriously injuring two of them.——The *Hampshire Independent* says, in allusion to the sinking of the viaduct on the Avon, that "the bridge had never been considered safe, and the centres have never been removed. A gradual sinking has been going on for some time, and last week it was found necessary to prop up the arches by a great number of strong supporters, and to carry over the rails on timbers of great strength and thickness. The arches are now being repaired, and it is hoped the traffic can be still carried on uninterruptedly."——The entire construction of the Trent Valley line of fifty miles, lately opened, has cost 1,950,000*l.*, or about 21,000 per mile. The first sod was turned in November, 1845.——The foundation stone of the Gonerby tunnel, on the Ambergate, Nottingham, and Boston line, was laid on the 21st ult. It will be 650 yards long, 30 feet high, and 24 feet wide, and will require 5,000,000 of bricks to case it.——The foundation-stone of the Helmshore viaduct, on the East Lancashire line, was laid on Thursday week. It is to be 400 yards long, double, and divided by retaining walls in the middle. There are to be fifteen arches, the principal of which is about 50 feet in height. They are to be erected on a curve of about ¼ mile radius. The works on this and other parts of the line are already in a forward state.——The keying-in of the largest arch of the extension viaduct at Huddersfield, on the Manchester and Huddersfield line, also took place on Thursday week. There are forty-seven arches on this viaduct. At the crowning arch, the square width of the roadway is 35 feet; oblique width, 56 feet 9 inches; rise, 9 feet 6 inches; width between parapets, 25 feet. This arch spans the Bradford road at an angle of thirty-eight degrees.——Penny-a-mile Government trains have been established between Gateshead and the metropolis; fare 20*s.*, children half fare; under three years free.——"Great works," says the *Berwick Warder*, "are in progress at Newcastle for the purpose of connecting the Newcastle and Berwick line with that which is to pass over the Tyne by the high level bridge; the foundations of which are now being proceeded with. This will be effected by a series of arches over part of the town, to make room for which several houses in the Castle-garth, Dean-street, Pilgrim-street, and the Manors have been removed, among which are the old Surgeons' Hall and one of the almshouses.——The bridge over the Tyne will form a new feature in that branch of architecture, uniting a railway on the summit of its arches, with a carriage-road suspended beneath them by iron rods."——The high level bridge over the Tweed, for the purpose of connecting the North British with the Newcastle and Berwick line will consist, according to the plan, of twenty-eight stone arches of 60 feet span, fourteen of which, the river arches, will have an elevation of 120 feet above low-water mark; the other fourteen sloping off the hill on the south side, towards the river. The contractors are busily employed with the land arch pier foundations and the river piles. The whole fabric is to be finished in three years, a temporary timber framework bridge, as already noticed, being designed to form a substitute till then. The stations on the Newcastle and Berwick are from designs by Mr. Benjamin Green, of Newcastle. They are all in the Elizabethan style. The architect has adopted a uniform system of combining two dwelling-houses together, by which he has obtained an increased elevation, and of course a more imposing appearance. At all the level crossings, too, the gatekeepers' and labourers' cottages are combined in one building, which, says the *Warder*, not only gives a very picturesque and pretty appearance, but also economises expense by reducing the number of cottages otherwise required. There is a bow window in every booking-office, so that the clerks can see both up and down the line while sitting at their desks. Each station has an arcade affording shelter from sun and rain, and the platforms are of the uniform length of 200 feet on both sides of the line. These are faced with ashler work, and laid with strong Lazenby flags. At Tweedmouth, where an important terminal station and depot are to be erected, the company are also about to build a row of fifteen cottages for their workmen, each containing two fire-rooms and pantry on the ground floor, and three sleeping rooms above, with yard, coal-house, piggery, and other conveniences, behind these; and, adds our authority, might afford some useful hints to the Cottage Improvement Society. The contractors are, from the North Shields line to Morpeth, Messrs. Rush and Lawton; from Morpeth to Lesbury, Messrs. Hattersley and Nowell; from Lesbury to Belford, Messrs. Mackay and Blackstock; and from Belford to Tweedmouth, Messrs. Grahamsley and Reed. Messrs. Mackay and Blackstock are likewise the contractors for the bridge over the Tweed. The working of the line is under the superintendence of Mr. Jas. Allport, and Mr. Hudson is the chairman. The telegraph is already in operation along the line from Newcastle to Morpeth, and the posts are placed all the way to Tweedmouth for its continuation northwards.——The operations at the station of the Caledonian line, in Lothian-road, Edinburgh, are being carried on with the utmost vigour and rapidity by large bodies of workmen. The station will comprehend an area of about twelve acres, and, inclusive of the price of ground and cost of station-house, will exhaust the large sum of nearly 100,000*l.* [according to the *Register*. *The Witness* states the cost of the 'terminus' itself at 30,000*l.*] The building is from the design of Mr. Tite, and the contract for its erection has been taken by Mr. Lind, the builder of the Assembly Hall and the Scott Monument. Considerable progress has been made in and near the deep cuttings by Grove-street, as the line enters the city. The whole of the Edinburgh branch, 27¼ miles in length, is to be opened about 1st October next. From Beatock to 3 miles north of Lanark, a length of 39½ miles, the line is expected to be opened by 1st of March, 1848. Between Beatock and Carlisle, the first 40 miles will be ready by 1st August next. The working stock is being built chiefly at Greenock under Mr. R. Sinclair, locomotive superintendent of the Glasgow and Greenock line. At Perth, Stirling, and other places, also numerous carriages and waggons are in progress—all on the most recent and approved principles.——The *Boston Traveller* says, that two thousand able-bodied men can obtain employment as common labourers along the line of the Erie Railway between Otisville and Binghampton; wages offered 4*s.* a day.——The telegraph wire at the Western Railway depôt, in Charlton, says a Boston paper, was lately blown across the track by a high wind, and caught hold of a train, sweeping off three of the brakesmen, one of whom was killed. The posts of our own telegraphs should be occasionally looked to.—By the way, the result of the late cup-day at Newcastle, could not be forwarded from Derby to town, on account of the effect of the lightning on the needles. We lately noticed some new invention which promised to prevent such a casualty in future.

ARCHÆOLOGY IN SUSSEX.

The Sussex Archæological Association held their annual meeting, at Chichester, on Thursday in last week, when the Lord Bishop presided, and a large number of members attended.

Mr. Freeman read a paper on Chichester Cathedral, but the reporters were so badly placed that they were unable to take any notes. The *Brighton Herald*, indeed, says, that with the exception of the vice-president and Mr. Britton, the speakers read and spoke in so low a tone of voice, and with such tremulous nervousness, arising from their being unused to address a numerous audience, that it was with extreme difficulty the distinct meaning of a sentence could be gathered.

Mr. Britton, before he read a paper on market crosses, particularly in reference to the antique Chichester cross, contrasted the present age, when so much intelligence was abroad, and inquiries were prosecuted on every side and on every subject, with the state of architectural literature and science when he commenced the world. He began his architectural studies literally alone: not a drawing, not a design, not a sketch fit to be seen was to be obtained. Mr. B. produced an early sketch of the great, but eccentric, Mr. Turner, who, at that time, would have made a sketch for a guinea that he would now expect to receive thirty guineas for. He also produced some original drawings of the well-known Captain Grose, the antiquary, and compared them with the beautiful and finished drawings of the present day, and now lying before the meeting, which shewed how much a knowledge of the science had extended, and how a taste for it was being diffused throughout society. After a few more prefatory observations, Mr. Britton proceeded to read a paper on market-crosses, which, he said, were intended originally to give shelter to persons attending markets. Religious men, immured in their cells, stood in need of the products of husbandry, and were dependent on them for food. To obtain a supply, inducements were held out to the country people to bring them into towns; and to promote this object they were exempted from tolls. Mr. Britton then gave a brief history of the various existing crosses in the country. Fortunately the history of Chichester-cross had been preserved by the

To learn more about OCR and PDF Compression visit ThePaperlessOffice.com